

***What is claimed is:***

1. A method for selecting an optimal balance between direct cost and a number of suppliers comprising:
  - soliciting bids from a plurality of suppliers for a plurality of lots;
  - receiving at least one bid from a supplier for each lot;
  - storing the bids from each supplier in a database; and
  - generating at least a first and second optimal solution from the bids in the database, the first optimal solution having a different number of suppliers than the second optimal solution.
2. The method of claim 1 wherein the generating comprises:
  - inputting the bids into an optimization routine, including:
    - selecting the number of suppliers for each optimal solution;
    - determining lowest bids received from the number of suppliers for the lots for each optimal solution;
    - calculating a direct cost from the lowest bids received from the number of suppliers for each optimal solution; and
    - providing each optimal solution to a buyer.
3. The method of claim 1 wherein the generating comprises:
  - choosing a minimum cost; and
  - determining the optimal solution with a direct cost being at least the minimum cost.
4. The method of claim 1 wherein the storing comprises:
  - removing the bids from at least one undesired supplier.
5. The method of claim 4 wherein the generating comprises:
  - providing the optimal solution with lowest bids from the suppliers other than the at least one undesired supplier.
6. The method of claim 1 wherein the storing comprises:
  - choosing the bids from at least one preferred supplier.
7. The method of claim 6 wherein the generating comprises:
  - providing the optimal solution with lowest bids from the at least one preferred supplier for the lots on which the at least one preferred supplier bid lower than other suppliers and lowest bids from the other suppliers for the lots on which the at least one preferred supplier did at least one of not bid and not bid the lowest bid.

8. The method of claim 1 wherein the generating comprises:  
ranking the bids in accordance with cost.
9. The method of claim 1 wherein the soliciting comprises:  
identifying at least one of goods and services to be purchased.
10. The method of claim 1 further comprising:  
displaying at least one of the first and second optimal solutions.
11. The method of claim 1 wherein the generating comprises:  
assigning an integer value to each lowest bid in each lot.
12. The method of claim 1 wherein the receiving comprises:  
submitting bids from:
  - a first supplier that bid on at least one of a first lot, a second lot, a third lot and a fourth lot;
  - a second supplier that bid on at least one of the first lot, the second lot, the third lot and the fourth lot;
  - a third supplier that bid on at least one of the first lot, the second lot, the third lot, and the fourth lot; and
  - a fourth supplier that bid on at least one of the first lot, the second lot, the third lot, and the fourth lot.
13. The method of claim 12 wherein the generating comprises:  
calculating the first and second optimal solutions, including:
  - the first optimal solution, having a first cost, for three suppliers, the first optimal solution listing the first supplier as a provider for at least one of the first, second, third and fourth lots and having a first cost, the third supplier as the provider for at least one of the first, second, third, and fourth lots, and the fourth supplier as the provider for at least one of the first, second, third and fourth lots; and
  - the second optimal solution, having a second cost, for two suppliers, the second optimal solution listing the third supplier as the provider for at least one of the first, second, third, and fourth lots, and the fourth supplier as the provider for at least one of the first, second, third and fourth lots.
14. The method of claim 1 further comprising:  
selecting one of the optimal solutions.

15. A method for selecting an optimal balance between direct cost and a number of suppliers comprising:

identifying at least one of goods and services to be purchased;  
soliciting bids from a plurality of bidders for a plurality of lots;  
receiving at least one bid from a supplier for each lot;  
storing the bids from each supplier in a database;  
inputting the bids into an optimization routine, including  
selecting the number of suppliers for at least a first and second optimal solution;  
determining lowest bids received from the number of suppliers for the lots for  
each optimal solution;

calculating a direct cost from the lowest bids received from the number of  
suppliers for each optimal solution;  
displaying each optimal solution; and  
choosing one of the optimal solutions.

16. A system for selecting an optimal balance between direct cost and a number of suppliers comprising:

a database for receiving and storing bid information from a plurality of suppliers for a  
plurality of lots; and

software for generating at least a first and second optimal solution from the bid  
information, the first optimal solution having a different number of suppliers than the second  
optimal solution.

17. The system of claim 16 wherein the bid information comprises at least one bid from a  
supplier for each lot.

18. The system of claim 16 wherein at least one of the first and second optimal solutions  
comprises a chosen supplier for each lot.

19. A machine readable medium that selects an optimal balance between direct cost and a  
number of suppliers comprising:

a first machine readable code that receives and stores bid information from a plurality of  
suppliers for a plurality of lots;

a second machine readable code that generates at least a first and second optimal solution from the bid information, the first optimal solution having a different number of suppliers than the second optimal solution; and

a third readable code that transmits the optimal solutions to a buyer.

20. The machine readable medium of claim 19 wherein the bid information comprises at least one bid from a supplier for each lot.

21. The machine readable medium of claim 19 wherein at least one of the first and second optimal solutions comprise a chosen supplier for each lot.

22. The machine readable medium of claim 19 wherein the bid information comprises:  
at least one bid on a first, second, third, and fourth lot from a first supplier; at least one bid on the first, second, third, and fourth lots from a second supplier, at least one bid on the first, second, third, and fourth lots from a third supplier, and at least one bid on the first, second, third, and fourth lots from a fourth supplier.

23. The machine readable medium of claim 22 wherein the first and second optimal solutions comprise:

the first optimal solution, having a first cost, for three suppliers, the first optimal solution listing the first supplier as a provider for at least one of the first, second, third and fourth lots and having a first cost, the third supplier as the provider for at least one of the first, second, third, and fourth lots, and the fourth supplier as the provider for at least one of the first, second, third and fourth lots; and

the second optimal solution, having a second cost, for two suppliers, the second optimal solution listing the third supplier as the provider for at least one of the first, second, third, and fourth lots, and the fourth supplier as the provider for at least one of the first, second, third and fourth lots.